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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,623	11/26/2003	Girish T. Dalal	201TR032	7109
37535 7	590 09/21/2005		EXAMINER	
NOVEON IP HOLDINGS CORP. 9911 BRECKSVILLE ROAD			PENG, KUO LIANG	
CLEVELAND, OH 44141-3247			'ART UNIT	PAPER NUMBER
			1712	
			DATE MAILED: 09/21/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

		$\mathcal{M}$				
-11.1-	Application No.	Applicant(s)				
	10/722,623	DALAL ET AL.				
Office Action Summary	Examiner	Art Unit				
	Kuo-Liang Peng	1712				
The MAILING DATE of this communication Period for Reply	appears on the cover sheet wi	th the correspondence address				
A SHORTENED STATUTORY PERIOD FOR RE WHICHEVER IS LONGER, FROM THE MAILING  - Extensions of time may be available under the provisions of 37 CFF after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory per  - Failure to reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the mearned patent term adjustment. See 37 CFR 1.704(b).	B DATE OF THIS COMMUNIC R 1.136(a). In no event, however, may a re riod will apply and will expire SIX (6) MON atute, cause the application to become AB	CATION.  apply be timely filed  THS from the mailing date of this communication.  ANDONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 3/	<u>'14/05 IDS</u> .					
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ T	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.					
3) Since this application is in condition for allo	☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice unde	er <i>Ex parte Quayle</i> , 1935 C.D	. 11, 453 O.G. 213.				
Disposition of Claims						
4)⊠ Claim(s) 1-18 is/are pending in the applicat	4)⊠ Claim(s) 1-18 is/are pending in the application.					
4a) Of the above claim(s) 6-18 is/are withdra	4a) Of the above claim(s) <u>6-18</u> is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.	•					
6)⊠ Claim(s) <u>1-5</u> is/are rejected.	6)⊠ Claim(s) <u>1-5</u> is/are rejected.					
7)⊠ Claim(s) <u>5</u> is/are objected to.	·					
8) Claim(s) are subject to restriction an	d/or election requirement.					
Application Papers						
9)☐ The specification is objected to by the Exam	niner.					
10) The drawing(s) filed on is/are: a) ☐ a	accepted or b) objected to	by the Examiner.				
Applicant may not request that any objection to	the drawing(s) be held in abeyar	ce. See 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the cor	•	• • • • • • • • • • • • • • • • • • • •				
11) The oath or declaration is objected to by the	Examiner. Note the attached	Office Action or form PTO-152.				
Priority under 35 U.S.C. § 119	•					
12) Acknowledgment is made of a claim for fore a) All b) Some * c) None of:	ign priority under 35 U.S.C. §	119(a)-(d) or (f).				
1. Certified copies of the priority documents have been received.						
3. Copies of the certified copies of the p	oriority documents have been	received in this National Stage				
application from the International Bur	eau (PCT Rule 17.2(a)).					
* See the attached detailed Office action for a	list of the certified copies not	received.				
Attachment(s)	" —	(DTO 440)				
<ol> <li>Notice of References Cited (PTO-892)</li> <li>D Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> </ol>		dummary (PTO-413) s)/Mail Date				
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB. Paper No(s)/Mail Date 3/14/05, 11/26/03.		nformal Patent Application (PTO-152)				

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#### **DETAILED ACTION**

### Election/Restrictions

- Restriction to one of the following inventions is required under 35 U.S.C.
   121:
  - I. Claims 1-5, drawn to a polymer blend, classified in class 525, subclass 479.
  - II. Claims 6 18, drawn to a melt processed article, classified in class428, subclass 36.9.
- 2. Inventions I and II are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as a component of an article that is manufactured by solution casting rather than melt processing and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be

obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

- 3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.
- 4. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).
- 5. During a telephone conversation with Mr. Joe Powell on August 15, 2005 a provisional election was made without traverse to prosecute the invention of I, claims 1-5. Affirmation of this election must be made by applicant in replying to

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this Office action. Claims 6 - 18 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

### Claim Objections

6. Claim 5 is objected to because of the following informalities:

In Claim 5 (line 5), should "AlO<sub>2</sub>" be -- Al<sub>2</sub>O<sub>3</sub> --?

Appropriate correction is required.

# Claim Rejections - 35 USC § 112

- 7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

  The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 8. Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In Claim 1, it is not clear as to what the recited amount of the impact modifier based on.

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# Claim Rejections - 35 USC § 102

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9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 10. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Dettermann (US 5 912 277).

Dettermann discloses a polymer blend comprising a CPVC, an impact modifier, a stabilizer, etc. (col. 3, lines 16-29) The intrinsic viscosity and chlorine content are described in col. 4, lines 51 to col. 5, line 34. The amount of the stabilizer is described in col. 6, lines 48-65. A co-stabilizer of an alkali metal aluminosilicate zeolite can be used in an amount described in col. 6, line 66 to col. 7, line 35. The impact modifier can be a silicone rubber/acrylic copolymers, etc. (col. 7, lines 35-49 and col. 8, line 32 to col. 10, line 5) The typical amounts of the ingredients are also exemplified in Examples.

11. Claims 2-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Dettermann as evidenced by Eshuis (US 5 635 588).

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Dettermann discloses a polymer blend, supra, which is incorporated herein by reference. Eshuis teaches that a typical zeolite has a composition described in col. 1, lines 62-67. Furthermore, Dettermann teaches the use of CBV 10A zeolite as the aluminosilicate zeolite. (col. 6, line 66 to col. 7, line 34) Eshuis teaches that the CBV 10A zeolite can have a composition described in col. 4, lines 4-12.

## Claim Rejections - 35 USC § 103

- 12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 13. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dettermann as evidenced by Eshuis in view of Lockledge (US 6 096 820).

Dettermann discloses a polymer blend, supra, which is incorporated herein by reference. Dettermann teaches the use of a dialkyltin bis(thioglycolate) (col. 6, lines 48-65) Dettermann is silent on the use of the specific zeolite set forth in the instant claim. However, as mentioned previously, Dettermann teaches the use of

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alkali metal aluminosilicate zeolites. Furthermore, Lockledge teaches the use of a zeolite 4A as a stabilizer in a CPVC composition. The motivation of using the zeolite 4A is to afford a CPVC composition with better stability. (col. 1, lines 5-12, col. 3, line 55 to col. 4, line 39 and Examples) Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate Lockledge's zeolite 4A into Dettermann's composition. Especially, Lockledge is in the same field as that of the Dettermann's endeavor. Note that Lockledge's zeolite 4A reads on Applicants' zeolite 4A in the specification. (page 11, 3<sup>rd</sup> paragraph) Therefore, Examiner has a reasonable basis to believe that both of them have the same formula.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuo-Liang Peng whose telephone number is (571) 272-1091. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski, can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

klp

September 16, 2005

Kuo-Liang Peng Primary Examiner Art Unit 1712